DETAILED ACTION

1. This action is in response to applicant's communication filed on 02 October 2009. **Claims 1, 23, and 41** are now pending in the present application and claims **2-22, 24-40, and 42-45** are canceled. This office action is made **Final**.

2. Brief Description of Received Signal Strength Indication (RSSI) and Distance

…Traditionally, DSPs in cordless telephones determine the received signal strength of the signals between the base and handset to determine whether to switch to a different communication channel for the RF link. Thus, those of skill in the art are familiar with this measure and are familiar with the fact that it provides an estimate of channel quality. Further, those of skill in the art are familiar with an axiom by which the **signal strength tends to be indirectly related to the distance** between the base unit and the handset. Thus, **signal strength** is a **good estimate** of this **distance**… (for above paragraph - see instant application, section detailed description, pg. 6, lines 5 et seq.).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 23, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Inagami (US 4,884,294)** in view of **Dennerlein et al**. (hereinafter Dennerlein) (**US 5,117,504**), **Tozawa et al**. (hereinafter Tozawa) (**US 5,198,800**), and further supported **Briffett et al**. (hereinafter Briffett) (**US 6,154,665**).

Regarding **claim 1**, Inagami discloses cordless telephone (see col. 3, lines 55-61; col. 1, lines 9-13; Figs. 2-4), comprising:

a base unit (5), including a push button switch (PAGE PBS) which reads on the claimed "paging mechanism" (see col. 3, lines 55-61; col. 4, lines 2-4; Figs. 2-4); and

a handset (1), including a discrimination sound generation circuit (combination of 20, 31, 32) which reads on the claimed "alerting mechanism" responsive to the paging mechanism (PAGE PBS) (see col. 3, lines 55-61; col. 4, lines 35-37; Figs. 3-4),

wherein the paging mechanism (PAGE PBS) and alerting mechanism (combination of 20, 31, 32) are for use in locating a missing handset (1) (see col. 5, line 65 - col. 6, line 3; col. 7, lines 1-4; Figs. 3-4), where the paging sound level is high for a user to hear the handset (1) in which for use in locating a missing handset is implicit as the user is able to hear the paging sound of the handset (1) from a distance as evidenced by the fact that one of ordinary skill in the art would clearly recognize, and

wherein at least one of the base unit (5) and the handset (1) includes a sound controller (20) which reads on the claimed "page adjusting mechanism" to affect a characteristic (e.g., sound level or sound pattern) of a page alerting signal output from the alerting mechanism (combination of 20, 31, 32) based on a signal measurement (e.g., condition such as distance) (see col. 5, line 54 - col. 6, line 6; col. 7, lines 1-4,48-50), where the sound level is affected

by conditions such as whether or not the user is talking into handset or holding handset, or based on distance between the user and the handset;

wherein the measured signal is related to a distance (see col. 5, line 54 - col. 6, line 6; col. 7, lines 1-4,48-50), where the sound level is affected by conditions such as whether or not the user is talking into handset or holding handset, or based on distance between the user and the handset, and

wherein the characteristic of the page alerting signal is at least one of a duration of the page alerting signal, a volume of the page alerting signal (see col. 5, line 54 - col. 6, line 6; col. 7, lines 1-4), where the sound level is affected by conditions such as whether or not the user is talking into handset (1) or holding handset, or based on distance between the user and the handset, and

a tonal quality (e.g., sound pattern) of the page alerting signal (see col. 7, lines 1-4, 48-50; col. 5, line 54 - col. 6, line 6), where the sound generator can generate sound patterns and sound levels that are affected by conditions such as whether or not the user is talking into handset or holding handset, or based on distance between the user and the handset. Inagami does not specifically disclose having the feature(s) based on a signal delay measurement; and wherein the measured signal delay is related to a distance between the base unit and the handset, and a duration of the page alerting signal. However, the examiner maintains that the feature(s) based on a signal delay measurement; and wherein the measured signal delay is related to a distance between the base unit and the handset was well known in the art, as taught by Dennerlein.

In the same field of endeavor, Dennerlein discloses the feature(s) based on a signal delay measurement; and wherein the measured signal delay is related to a distance between the base unit and the handset (see col. 1, lines 20-33,57-59), where the distance is computed between the stationary radio station (e.g., base unit) and the mobile radio telephone set.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Inagami and Dennerlein to have the feature(s) based on a signal delay measurement, in order to compute the distance from the signal delay, as taught by Dennerlein (see col. 1, lines 31-35). The combination of Inagami and Dennerlein does not specifically disclose having the feature(s) a duration of the page alerting signal.

However, the examiner maintains that the feature(s) a duration of the page alerting signal was well known in the art, as taught by Tozawa.

In the same field of endeavor, Tozawa discloses the feature(s) a duration (e.g., time interval) of the page alerting signal (e.g., alarm sound) (see col. 4, lines 29-36), where the transceivers have an alarm sound that is a short time interval for short distances and long time interval for long distances.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Inagami, Dennerlein, and Tozawa to have the feature(s) a duration of the page alerting signal, in order to have an alarm sound that varies depending on position, as taught by Tozawa (see col. 4, line 21). The combination of Inagami, Dennerlein, and Tozawa clearly discloses the feature(s) indicated above as evidenced by the fact that one of ordinary skill in the art would clearly recognize. However,

the examiner maintains that the feature(s) wherein the measured signal delay is related to a distance between the base unit and the handset, and wherein the characteristic of the page alerting signal is at least one of a duration of the page alerting signal, a volume of the page alerting signal, and a tonal quality of the page alerting signal was well known in the art, as taught by Briffett.

As further support in the same field of endeavor, Briffett discloses the feature(s) wherein the measured signal delay (e.g., interval) is related to a distance (e.g., proximity) between the base unit (e.g., belt clip 20) and the handset (e.g., telephone 1) (see col. 7, lines 15-17,28-36; col. 2, lines 63-65; col. 3, lines 27-29; Figs. 1, 6, & 10), where the system provides a proximity signal that relates to the received signal strength and pitch of the locating alarm, and

wherein the characteristic of the page alerting signal (e.g., alarm) is at least one of a duration (e.g., brief) of the page alerting signal, a volume of the page alerting signal, and a tonal quality (e.g., pitch) of the page alerting signal (see col. 4, lines 49-53,62-65; col. 7, lines 15-17,28-36; col. 2, lines 63-65; col. 3, lines 27-29; Figs. 1, 6, & 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Inagami, Dennerlein, Tozawa, and further supported Briffett to have the feature(s) wherein the measured signal delay is related to a distance between the base unit and the handset, and wherein the characteristic of the page alerting signal is at least one of a duration of the page alerting signal, a volume of the page alerting signal, and a tonal quality of the page alerting signal, in order to provide a

radiotelephone with a proximity detector that is used for determining location when misplaced, as taught by Briffett (see col. 1, lines 5-12).

Regarding **claim 23**, Inagami discloses a method of affecting an alerting signal of a telephone handset (1) (see col. 3, lines 55-61; col. 1, lines 9-13; Figs. 2-4), comprising the steps of:

sensing a condition related to a location of the handset (1) (see col. 5, line 54 - col. 6, line 6; col. 7, lines 1-4,48-50), where the sound level is affected by conditions such as whether or not the user is talking into handset or holding handset, or based on distance between the user and the handset; and

affecting a characteristic (e.g., sound level or sound pattern) of the alerting signal based on the sensed condition (see col. 5, line 54 - col. 6, line 6; col. 7, lines 1-50), where the sound level is affected by conditions such as whether or not the user is talking into handset or holding handset, or based on distance between the user and the handset. Inagami does not specifically disclose having the feature(s) wherein the sensed condition is a signal delay measurement; and wherein the measured signal delay is related to a distance between the base unit and the handset, and a duration of the alerting signal. However, the examiner maintains that the feature(s) wherein the sensed condition is a signal delay measurement; and wherein the measured signal delay is related to a distance between the base unit and the handset was well known in the art, as taught by Dennerlein.

In the same field of endeavor, Dennerlein discloses the feature wherein the sensed condition is a signal delay measurement; and wherein the measured signal delay is related to a distance between the base unit and the handset (see col. 1, lines 20-33), where the distance

is computed between the stationary radio station (e.g., base unit) and the mobile radio telephone set.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Inagami and Dennerlein to have the feature wherein the sensed condition is a signal delay measurement; and wherein the measured signal delay is related to a distance between the base unit and the handset, in order to compute the distance from the signal delay, as taught by Dennerlein (see col. 1, lines 31-35). The combination of Inagami and Dennerlein does not specifically disclose having the feature(s) a duration of the page alerting signal. However, the examiner maintains that the feature(s) a duration of the page alerting signal was well known in the art, as taught by Tozawa.

In the same field of endeavor, Tozawa discloses the feature(s) a duration (e.g., time interval) of the page alerting signal (e.g., alarm sound) (see col. 4, lines 29-36), where the transceivers have an alarm sound that is a short time interval for short distances and long time interval for long distances.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Inagami, Dennerlein, and Tozawa to have the feature(s) a duration of the page alerting signal, in order to have an alarm sound that varies depending on position, as taught by Tozawa (see col. 4, line 21). The combination of Inagami, Dennerlein, and Tozawa clearly discloses the feature(s) indicated above as evidenced by the fact that one of ordinary skill in the art would clearly recognize. However, the examiner maintains that the feature(s) wherein the measured signal delay is related to a

distance between the base unit and the handset, and wherein the characteristic of the alerting signal is at least one of a duration of the alerting signal, a volume of the alerting signal, and a tonal quality of the alerting signal was well known in the art, as taught by Briffett.

As further support in the same field of endeavor, Briffett discloses the feature(s) wherein the measured signal delay (e.g., interval) is related to a distance (e.g., proximity) between the base unit (e.g., belt clip 20) and the handset (e.g., telephone 1) (see col. 7, lines 15-17,28-36; col. 2, lines 63-65; col. 3, lines 27-29; Figs. 1, 6, & 10), where the system provides a proximity signal that relates to the received signal strength and pitch of the locating alarm, and

wherein the characteristic of the alerting signal (e.g., alarm) is at least one of a duration (e.g., brief) of the alerting signal, a volume of the alerting signal, and a tonal quality (e.g., pitch) of the alerting signal (see col. 4, lines 49-53,62-65; col. 7, lines 15-17,28-36; col. 2, lines 63-65; col. 3, lines 27-29; Figs. 1, 6, & 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Inagami, Dennerlein, Tozawa, and further supported Briffett to have the feature(s) wherein the measured signal delay is related to a distance between the base unit and the handset, and wherein the characteristic of the alerting signal is at least one of a duration of the alerting signal, a volume of the alerting signal, and a tonal quality of the alerting signal, in order to provide a radiotelephone with a proximity detector that is used for determining location when misplaced, as taught by Briffett (see col. 1, lines 5-12).

Regarding **claim 41**, the combination of Inagami, Dennerlein, Tozawa, and further supported Briffett discloses every limitation claimed, as applied above (see claim 23), in addition Inagami further discloses a method as recited in claim 23, wherein the base unit (5) is a cordless telephone base unit (see col. 3, lines 55-61; Figs. 2-4).

Response to Arguments

4. Applicant's arguments with respect to claims 1, 23, and 41 have been considered but are moot in view of the new ground(s) of rejection necessitated by the amended language and/or new limitations.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIE J. DANIEL JR whose telephone number is (571)272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,Jr/

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06 January 2010

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